James "Jack" Murray (1940–1994)

J. Jack Murray. Source: family photo

Jack Murray was born in 1940 in Jesup, Georgia. He received a BA in agronomy from the University of Georgia and studied at the University of Nevada in Reno, graduating with an MS in plant breeding in 1969.[1] He worked for the USDA's Agricultural Research Service from 1969 to 1988, first in University Park, Pennsylvania, and then in Beltsville, Maryland.[2]

At Beltsville, Murray served as a research agronomist, conducting research on turfgrass breeding, development, and management. His contributions include a better understanding of tolerance to low pH soils, disease resistance in many species, and tall fescue and Kentucky bluegrass improvement.[3] His development of 'Belturf' Kentucky bluegrass germplasm was significant as 'Belturf' has been utilized in breeding programs to add important stress tolerance genes to new cultivars.[4]

Murray's greatest contributions, however, were with zoysiagrass, a species first researched and developed by Murray's predecessor at Beltsville, Fred V. Grau in the 1950s. Murray admired zoysiagrass for its ability to provide good turf quality with low inputs of fertilizer and its tolerance of low pH soils. He realized that lawns and golf courses would need to use less fertilizer and water in the future.[5] 'Meyer' zoysiagrass, released by Dr. Grau in the early 1950s, was the standard and most widely used zoysia cultivar. However, 'Meyer' zoysiagrass is slow to establish because it must be planted with vegetative material, or pieces of plants (it does not produce uniform plants from seeds). Therefore, Murray and Dr. Milt Engelke from Texas A&M University traveled to the Far East in 1982, collecting over 800 unique zoysiagrass types growing in their native environment, for use in their breeding programs.[6] This was an important step towards developing improved zoysiagrasses.

Utilizing the germplasm collected, Murray initiated a program to develop a new seed-based zoysiagrass cultivar. 'Zenith' and 'Compadre' zoysiagrass are seeded cultivars from his program that have been marketed for many years, helping homeowners and golf course superintendents to establish zoysiagrass much faster and more cost effectively.[7] Many other zoysiagrass cultivars are now in the marketplace, or under development as a result of Murray's collection and breeding efforts.[8]

Murray also developed a mixture of zoysiagrass and tall fescue that has been used on the National Mall in Washington, DC.[9]

Other important contributions arising from Murray's research were increased use of sewage sludge and compost for fertilization of turfgrass, and evidence that leaving grass clippings on lawns does not lead to thatch development.[10]

Murray was also instrumental in establishing the National Turfgrass Evaluation Program (NTEP), the world's leading turfgrass evaluation program and the standard for turfgrass selection by professionals and homeowners.[11]

For more on Jack Murray: http://www.bladerunnerfarms.com/bladerunner-farms-research/

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[1] "A passing noted: James "Jack" Murray," *Golf Course Management* 62(7) (July 1994): 72.
[2] "In Memorium: James Jack Murray," *ASPA Turf News* 18(4) (July/August 1994): 50.
[3] *Golf Course Management*, 72.
[4] Ibid.
[5] Kevin Morris, President, National Turfgrass Federation, E-mail message. 7 October 2014.
[6] *Golf Course Management,* 72.
[7] Ibid.
[8] Kevin Morris.
[9] *Golf Course Mangement*, 72.
[10] *ASPA Turf News*, 53.
[11] Kevin Morris.